

REMARKS

Claims 1-6 are pending. Claim 1 has been amended. Claims 7-12 have been cancelled as being directed to a non-elected invention. Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-6 were rejected under 35 U.S.C. § 102(b) over Buchwalter et al. (U.S. Patent No. 6,184,121). Applicants respectfully traverse this rejection.

Amended claim 1 recites a substrate with a microstructure formed thereon which includes a temporary substrate supporting an upper substrate; a buffer layer formed on an upper surface of the temporary substrate to have a plurality of shapes with air gaps spaced apart from each other at regular intervals; and an adhesive layer formed between the upper substrate and the buffer layer so that the upper substrate is adhered to the temporary substrate via the adhesive layer and the buffer layer; wherein the upper substrate is plastic or metal foil or a very thin substrate, and has high flexibility, and on which a device is formed at a process of manufacturing the device; wherein the buffer layer is not a component of the device which is formed on the upper substrate; and wherein the temporary substrate is removed from the upper substrate after the manufacturing process of the device.

In contrast, Buchwalter discloses forming a device on a semiconductor substrate that is not flexible and then covering the device with an insulating cover layer 120. Additionally, in Buchwalter, neither the upper substrate nor the temporary substrate are removed and the adhesive layer is adhered permanently. Buchwalter further discloses that the microstructures formed on the semiconductor substrate which is part of the entire device and related to the operation of the device and the insulating layer in Buchwalter is an insulating and planarization layer. Buchwalter fails to teach or suggest, a flexible substrate, a temporary substrate that is removed after the process, an adhesive layer that is temporarily adhered, a substrate that is not a part of the microstructures, and an insulating layer that reacts as a buffer layer but does not relate to electrical characteristics.

Accordingly, Buchwalter fails to teach or suggest, a substrate with a microstructure formed thereon which includes a temporary substrate supporting an upper substrate; a buffer layer formed on an upper surface of the temporary substrate to have a plurality of shapes with air gaps spaced apart from each other at regular intervals; and an adhesive layer formed between the upper substrate and the buffer layer so that the upper substrate is adhered to the temporary substrate via the adhesive layer and the buffer layer; wherein the upper substrate is

plastic or metal foil or a very thin substrate, and has high flexibility, and on which a device is formed at a process of manufacturing the device; wherein the buffer layer is not a component of the device which is formed on the upper substrate; and wherein the temporary substrate is removed from the upper substrate after the manufacturing process of the device, as recited in amended claim 1.

Claims 2-6 are believed allowable for at least the same reasons presented above with respect to claim 1 by virtue of their dependence upon claim 1. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

Conclusion

Therefore, all objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

Respectfully submitted,

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